

VOL. I. MAY, 1852. No. 1.

No. 1.

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departure from the constitution of healthy tissues. The following analysis of Scirrhus is by Foy :

Albumen, fatty matter, fibrin, and water,	-	61.10
Iron,	- - - - -	1.65
Carb. soda,	- - - - -	5.00
Bone phos. lime,	- - - - -	16.60
Carb. of lime,	- - - - -	6.60
Other salts,	- - - - -	8.95

The Encephaloid variety, according to the same authority, gave :

Albumen, fat, fibrin, water, &c.,	- - -	78.35
Oxyd of iron,	- - - - -	1.35
Carb. soda,	- - - - -	2.75
Bone phos. lime,	- - - - -	6.80
Carb. of lime,	- - - - -	4.00
Other salts,	- - - - -	5.95

The relation of the organic to the inorganic constituents in healthy tissues varies according to the structure, thus rendering even an approximate comparison difficult, and an accurate one impossible; but if those parts most frequently the seat of the disease be taken as the standard, we find that in malignant growths the salts, and especially those of lime, are in very great excess, while the protien compounds are relatively deficient.

The location of the disease in glands, or on surfaces performing the function of glands,—as the skin, mucous membrane of the stomach, &c., all the seats of abundant cell growths—taken in connection with its structure, seems to indicate as the first step in the departure from the healthy performance of the functions of those organs, the production, instead of a healthy, of a morbid cell, the pathology of which consists in its special characters as before noticed; while the relatively large amount of the inorganic substances sustains to the cell structure the relation either of cause or effect.

The rapid production and disintegration of cell structures would, by oxydation of the phosphorus of the albumen, result in an excess, not only in the excretions, but in the system and especially in the diseased part, of the phosphatic salts, and in this manner they may be regarded as a result of the disease.

On the other hand, we may suppose that after the complete development of the osseous system, there being very much less demand for calcareous substances, they accumulate in excess, and

after having passed the limit of healthy variation, produce sensible disease; at first local in its character, but very soon, especially if situated in parts where absorption is active, becoming constitutional and giving rise to the peculiar cachexia.

The local affection being once established, the excess of the inorganic substances may be perpetuated or even increased, as already indicated, by the rapid metamorphosis of azotized nutriment, thus giving rise to its malignancy. In this manner we may have the salts both as a cause and as an effect,—an hypothesis which seems to me to be sustained by numerous facts.

It is in accordance with the economy of nature to suppose that the inorganic constituents of the blood, coming as they do in contact with all the tissues, must, even though designed in the main for the bony system, possess an important influence in the nutrition of the soft parts, and that any appreciable change in the quantity of the salts would modify in a corresponding degree the assimilative process.

The frequent location of the disease in the testicle and female breast, parts to which there is a determination of these salts, and the secretions of which contain them in a large per centage, seems to strengthen this hypothesis.

The relation which the disease bears to the condition of the osseous system, being often associated with softening of the bones, together with the fact of its making its appearance more generally in advanced life after the complete development of the skeleton, seems to favor the same idea; that is, that the disease is in some way dependent on the accumulation or morbid distribution of the calcareous and perhaps other inorganic substances. It is true the Encephaloid forms an exception to the rule in regard to age; but, as will be seen by referring to the analysis, the per centage of the salts, though less than in Scirrhus, is yet much above the standard for healthy tissues, and this fact together with the great activity of the digestive and assimilative organs and the consequent copious supply of nutriment, seems to account satisfactorily not only for the existence but for the rapid growth during the earlier periods of life of this variety of the disease.

The circumstances under which the disease originates, and the relation which it bears to other affections, seem to confirm our

view of the subject. Chelius says, "it is more common in persons who are very sensitive or melancholic, who lead a sedentary life, and who have suffered much care and trouble," "that its occasional cause is all mischief which produces constant but not intense irritation." These circumstances are all calculated to give rise to the phosphatic diathesis. Scarpa says the disease attacks persons "in whom, if there be suspicion of a diathesis, it is not that of scrofula." The same opinion has been entertained by others, and it is believed by Prof. Stone "that true Cancer never occurred in decidedly scrofulous subjects." From recent observations both in Europe and in this country, it seems probable that scrofula and tubercle are benefited by the use of phosphate of lime. The natural inference is, that if in tuberculosis the phosphates are deficient and require to be exhibited, and if cancerous disease is the opposite, the excess of the salts must be considered as an essential element of that disease, and they require elimination.

With the above facts before us, we are naturally led to enquire what influence the salts, and especially those of lime, soda and potash, are known to possess in the production of structures analogous to those under consideration! The first recorded experiments, so far as I know on this subject, are those of Beneke, who has administered the phosphate of lime internally with, as he believes, the evident effect of promoting cell growth in the system; it has since been used by others with like apparent results. In order to test this substance still farther, the following experiment was entered into by Dr. Beneke: Albumen (of the egg,) mingled with a small quantity of fat and phosphate of lime, was subjected for eight hours to a constant temperature of  $104^{\circ}$  F., when globules were found containing nuclei, and resembling, in all their characteristics, cells produced in the living body. A mixture of albumen and fat alone, under the same circumstances, failed to give the same results. These experiments have been carefully repeated and varied by the writer. From the notes made at the time the following is selected:

**Exp. No. 1.** Albumen, fat, and water intimately mingled together. Exposed to a uniform temperature of  $104^{\circ}$  F.—Examined after nine hours—contains oil globules, granules, and a few imperfect celluloid bodies.—After twenty-two hours no perceptible change noticed.

Exp. No. 2. Albumen, oil, water, and phosphate of lime.—At the expiration of ten hours, contains granules and bodies resembling the cells found in pus and mucus.—After twenty-two hours, granules previously noticed very abundant,—bodies resembling pus or mucus globules, with masses of matter very similar to those sometimes found in the urine and composed of epithelial scales.—After seventy hours, fewer of the granules and a large number of the *celluloid* bodies. Upon the addition of acetic acid dark spots are seen having all the appearance of nuclei; each globule seems to have a perfect cell wall.

Exp. Nos. 3, 4, 5, 6 were variations of Nos. 1 and 2, by subjecting to pressure during the process, and by adding to the preparation a small quantity of super carb. of soda in solution. The results were similar to those previously noticed.

Exp. No. 7. Oil, phosphorus, and water enclosed in a piece of bladder and placed in a cup containing albumen.—After thirty-six hours, the albumen in the cup contains granules and celluloid bodies as in previous experiments,—the bladder is nearly empty with the exception of gas with which it is distended. In the drop of fluid remaining there is found an abundance of the phos. lime, oil globules and the celluloid bodies. Acetic acid affects them precisely as it does organic cells. Ether renders the walls more opaque.

Exp. No. 8. Repetition of No. 7. with like results.

Exp. No. 9. Albumen, water, and super carb. soda in a glass tube, closed by clean, fresh membrane, and immersed in a cup containing oil, water and phos. lime held in solution by acetic acid.—After twenty hours the fluid in the cup contains granules, celluloid bodies, and triangular prismatic crystals almost exactly like those of the triple phosphate found in the urine. In the tube are granules and a few celluloid bodies.

Exp. No. 10. Albumen, water, phosphate of lime, slightly acidulated with acetic acid, in a tube closed by membrane, and placed in a cup containing oil, super carb. soda, and water.—After twenty hours the fluid has all passed out of the tube into the cup, which contains bodies like those already described, and others of greater size, more irregular outline, and containing large, distinct nuclei.

Exp. No. 13. Oil, phos. lime, and water slightly acidulated, in a tube closed by membrane and placed in a cup containing albumen,

water and carb. potassa.—After twenty-four hours the cup and tube both contained celluloid bodies of a small size and very regular outline.

The results of these experiments sustain the hypothesis of Dr. Beneke, that the phosphate of lime has an influence in promoting cell growth; and they further show that the size and character of the cell may be modified by other salts, especially those of soda and potash, and also by a variation in the conditions under which the substances are brought in contact,—see experiment No. 10, in which there were cells very similar to those of Cancer, as will be observed by comparing the two descriptions.

The facts above given, seem to me to indicate very strongly, that the presence in cancerous growths of the inorganic substances in greater proportion than in healthy tissues, is not an accidental circumstance; but, on the contrary, that at least one essential and important element of the disease consists in the excess of these salts, while the characteristic cell is probably produced by their action on the albumen and fat, supplied by the nutritive organs.

If the above inference be correct, we should expect that the growth of malignant tumors would be retarded, if not arrested, by any dietetic or medicinal treatment, calculated to prevent the introduction or favor the elimination of the phosphatic or other salts. Chelius advises that “animal food be avoided, and milk or vegetable diet ordered.” Prof. Stone, of New Orleans, in an article entitled “Hints on Cancerous Affections,” remarks:

“Experience has shown that the least nitrogenous diet is best in this disease. In the memoirs of the celebrated Nathan Smith, written some twenty years ago by his son, Nathan R. Smith, of Baltimore, are found the views of this remarkable man, which were based purely upon observation, without a chemical idea to theorise upon. His diet for this disease was vegetable; and of this he thought green corn the best. A case is related of a lady on whom he operated for a very large cancerous breast, involving the glands of the axilla. It was in the season for green corn, and the patient was put upon this article of diet. Sufficient was gathered when in the milk, and dried, to last until the season returned, and this made soft by boiling, and used with little or no seasoning. He states that whenever she attempted to return to her usual diet, she experienced shooting pains in the part, but finally, after two years, she gradually changed her diet. The notice of this case

was given seven years after the operation, and there was no appearance of a return of the disease. Corn in this state contains, I believe, more phosphorus than any other vegetable, but whether this renders it more suitable to this disease, I am not prepared to say. Professor Bigelow, of Boston, relates a case in which diet kept a cancerous affection dormant, at least, for many years, or rather he states that it was gradually getting well. This was the case of the late distinguished surgeon Amos Twitchell, of Keene, N. H., with whom I was well acquainted. I dined with him in 1848; he furnished a good dinner for his guests, but dined himself on milk and berries. Vegetables of the blandest kind constituted his main food, but I do not think he confined himself to any one article. The disease was seated in the inner canthus of one of his eyes, was removed many years ago with the knife, but the cicatrix soon took on the same degeneration, and he relied upon diet; and although it might appear to a gourmand a very meagre diet, he was able to undergo more fatigue at the age of 64 than many young men. I mention these cases not as being remarkable in themselves, but because they illustrate the effects of diet, and at the same time cover the views of two medical men, remarkable for their powers of observation."

The course of diet recommended above may be beneficial, as it seems to me, for two reasons: First, Vegetable food contains less of the salts than animal. It is evident, therefore, that by such a diet we, partly at least, prevent the introduction into the system of those substances. Secondly, The use of a diet consisting mainly of starch, gum, sugar, fruits, milk, &c., favors the production in the system, of the organic acids, and especially of the lactic, in which the calcareous and other salts are all soluble, and hence are more readily thrown off in the secretions.

The cachexia almost always present in this disease, requires a generous, supporting diet, from which animal food cannot, with safety, be entirely excluded; we are, therefore, compelled to look for *medicinal* agents for the accomplishment of the main object, namely: the elimination of the inorganic substances.

The organic acids, acting as solvents for the saline constituents, seem best adapted for fulfilling the above indication. Lactic acid especially, is known to possess the property of holding in solution a large quantity of the phosphate of lime; if, therefore, it can be introduced into the system in a free state, or in the form of an easily decomposed salt, as for instance the proto salt of iron, we

may reasonably expect that it will produce a change in the quality of the circulating fluids.

In order to test the re-action of the lactate of iron, I added gradually to a solution of it a small quantity of bone ash. After a short time, a precipitate of a pale, greenish color fell to the bottom of the glass, and when the fluid had become perfectly clear, it contained none of the iron salt, as was shown by the addition of a small quantity of the prussiate of potash in solution. Oxalic acid produced a copious deposit of oxalate of lime. Is it not probable, therefore, that if this salt be introduced into the circulation, a double decomposition would take place,—the lactic acid uniting with the lime to produce a soluble compound, readily excreted, while the iron, from its tonic properties, might be beneficial in the almost always debilitated condition of the patient?

Whether it acts in the manner thus indicated, or in some other way entirely different, it seems from the observations of Prof. Brainard, reported in the *Am. Journal of Med. Sciences* for April, 1852, that the lactate of iron *does* retard the growth of Cancerous disease. Prof. B. is continuing his observations on the effects of this salt administered both by the stomach and by injections into the veins.

In conclusion, we venture to make the following propositions as, probably true:

1st. That the essential element of Cancerous disease is a morbid accumulation, or distribution, of the calcareous and other salts.

2d. That the morbid accumulation or distribution of the salts, furnishes the conditions necessary for the development of the cellular and fibrous structure.

3d. That the indications for the cure of Cancer are, the removal from the system and an exclusion, as far as possible, of any excess of the saline substances.

4th. That, in the present state of our knowledge, the means best adapted for fulfilling these indications are, a regulated diet, consisting of animal food—flesh and milk,—combined with starch, sugar, fruits, &c., in large proportion; and the administration, both locally and generally, by the stomach and veins, of the organic acids, and especially the lactic, feebly combined with non-alkaline bases.

CHICAGO, April 20th, 1852.

ART. II.—*Case of Hypertrophy, and extensive disease of the right, and absence of the left Kidney.*

*Messrs. Editors*—THE following case should have been reported at an earlier date, but various duties caused its delay from time to time. It was peculiar, from the obscurity attending it; and derives interest from the very singular malformation revealed by the autopsy.

Capt. Wm. J. Cline, aged 41—the subject of this case—was visited by me for the first time on the 12th of May, 1850. I found him laboring under the usual symptoms of a mild form of bronchitis. On inquiry, it was ascertained that his health had not been good for some two years—that he had taken a cold two or three weeks previously, but had partially recovered, so as to be able to superintend the removal of his family from Chicago to Henry, in Marshall County. The fatigue and exposure attendant on the journey, had caused a fresh accession of disease.

The bronchial affection seemed to yield readily, but he remained feeble, and soon began to sink gradually under increasing indisposition, which could not have been anticipated from the slight nature of the attack. He finally died, July 2.

As no practical benefit would result from a detailed account, a condensed outline only of general symptoms will be given. Drs. Boal, of Lacon, and Baker, of Henry, were associated with myself attendance. Others were occasionally called in consultation.

The most prominent symptoms were great debility—want of appetite—variable pulse, sometimes full, frequently small and feeble, never strong, corded or wiry—chills, at intervals varying from two or three to eight or ten days, sometimes slight, at others more or less intense, and continuing frequently two or three days, each recurring paroxysm leaving him more debilitated than the previous—urine, passed with difficulty and pain, during the last eight or ten days of life, scanty, purulent, and tinged with blood. He frequently complained of a sensation of weight or stricture in the gastro-umbilical region—never of soreness or pain, unless pressure was made to a greater degree than would seem necessary to detect inflammation in that region.

The following was the result of the autopsy made twenty hours

after death—present, Drs. Paddock of Princeton, and Baker of Henry. Countenance, natural; body, emaciated; lungs, sound; heart, normal. In the abdomen, the effects of disease were extensive and well marked. The contiguous surfaces of the peritoneum investing the stomach, transverse arch of the colon, liver, kidney, and spleen, were firmly united by layers and bands of coagulable lymph, in some places firm and evidently of an old date, in others of recent formation and easily separable. Spleen, enlarged and rather firmer than natural. Liver, enlarged; portions of the right lobe slightly indurated; left, soft and easily torn. Kidneys—left, absent; right, enormously enlarged and its pelvis dilated into an immense sac filled with purulent urine. About four inches of the renal extremity of the ureter was dilated to the diameter of an inch, terminating in a cul de sac. The canal proper of the ureter, which would scarcely admit the passage of a small probe, arose from the side of the sac, about an inch from its cystic extremity. Bladder, mucous membrane in some places slightly inflamed. The peritoneal inflammation did not appear to have extended to the mucous membrane of the intestines. The old adhesions of the peritoneum in all probability occurred two years before, at the time of his former illness, which, as I was informed by Mrs. C——, was similar to the disease of which he died.

Peritoneal inflammation may, in general, be easily detected; but in this case it was not suspected during life—probably because the narcotic influence of the urea on the nervous centres, prevented a response by pain to the diseased action going on.

Experience has shown that, when any functional disturbance occurs which has a tendency to impoverish the blood, either by failing to supply its healthy constituents, or to excrete the effete azotized matters taken up in the course of its circulation, local inflammations are exceedingly apt to occur.

In this case, we may rationally suppose the nerves, having been, as it were, overwhelmed by the narcotic influence of the urea, failed to give notice by pain of the local inflammation, and it was left to go on in its course, pouring out lymph and agglutinating contiguous surfaces, as shown by the post mortem. In this way we may account for nearly the whole series of symptoms presented during life. But who would have suspected the existence of but

one kidney? We certainly did not; and if it had been suspected, how could death have been prevented, or life prolonged? Here art and skill were powerless. Nothing could be done but endeavor to relieve suffering, by meeting symptoms with what seemed to be appropriate remedies.

U. P. GOLLIDAY, M. D.

LACON, March 5, 1852.

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ART. III.—*Cases of Cancrum Oris.*

*Messrs. Editors*—THE following are the partial details of three cases of Cancrum Oris, which you may publish if you think them of sufficient interest.

CASE I.—Brown, aged about two years, had been for the greater part of its life subject to frequent attacks of Intermittent. The father, cachectic for several years past with chronic enlargement of the spleen, and some symptoms of mesenteric disease, had been frequently salivated, the last time during the winter of '50—51, from which lesions were formed in the mucous membranes of the mouth and palate. He never recovered, but died soon after his child from splenitis with typhoid symptoms: an illustration of the evil effects of malaria, the injudicious use of calomel, and bad hygienic management.

The child was taken with ulcerated spots on the gums, insides of the lips and cheeks, the ulcers first shallow, irregular, of a yellow ash color, spreading gradually and hardening the tissues in their immediate vicinity. When I first saw it, November 1st, 1851, there was a black gangrenous spot occupying the larger part of the upper lip; thence it spread rapidly taking the cheeks, nose, and under lip in its course, together with the whole superior maxillary bone, which fell into the mouth the night of the child's death, having been completely detached from its articulations with the other bones.

CASE II.—J. K., aged about eleven, whose father died a short time previously of typhoid fever, supervening on dysentery, had at the same time had a similar attack from which he imperfectly recovered.

On Tuesday, November 11, '51, the boy complained of chill-ness alternately with fever, breath fetid, gums spongy, and ulcerated as was the inside of the cheeks. The general symptoms were typhoid. I put him on a modification of the saline treat-

ment. On Wednesday, the 26th, he had so far improved that I left him for a few days; on my return, December 2d, I was much surprised to find him with gangrene, or rather sphacelus of both cheeks which were cold and black. The erosion continued steadily to progress till the 8th, when he died.

CASE III.—Was in Newark, ten miles east. It pursued a course similar to the above, and with a like termination. There were in this vicinity, the past fall, an unusual number of cases of this disease, of greater or less degrees of severity, but which as a general rule yielded readily to remedies.

The treatment most successful in my hands were horse-mint, (*Monarda Punctata*) nit. argt. and mur. tinct. fer. locally; cod liver oil, antacid and tonic laxatives. The two fatal cases appeared however to be in no way beneficially influenced by these remedies, or by iod. quin. acid muriatic, or any other remedies known to us. The boy who died in Newark received no remedial treatment, had never taken any of the mercurial preparations. Brown's child, as I learn, had taken calomel and blue mass repeatedly during its whole life. The boy Kitt, during my attendance on him took, Nov. 14, five grains of mass hydgr., this was all the mercurial he had from me, but during the past three years, the mother said he had repeatedly taken calomel, in fact "he had lived on it."

Now, how far these three fatal cases had their origin from the use of calomel, I cannot certainly say; but, of course, it is denounced as the sole cause.

It is well here to remark that the parents of both K. and B. were not accustomed to ventilate thoroughly their apartments, and that at K.'s at the time of the boy's sickness two others were ill of typhoid.

Yours, &c.,

CHARLES BRACKETT, M. D.

ROCHESTER, Ind., April 1, 1852.

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#### ART. IV.—*Morning Sickness of Pregnancy.*

*Messrs. Editors*—I AM induced to make a few remarks upon this symptom of pregnancy, not that I intend to mention all of the grades of nausea, or to refer to every remedy advised by the numerous authors; for, though such remedies appear varied and numberless enough, yet so far as my experience goes they have done but little towards relieving the above named sickness. In 1849, I saw in the Boston Medical and Surgical Journal a recipe by E. Mal-

locks, M. D., which I have since used in two cases of the severest grade of the above symptom, as well as in a number of cases of less severity, in all of which relief was very decisive. The recipe to which I refer is bichloride of mercury, in half grain doses, in form of pill every morning before rising, until three doses have been taken, the patient observing at the sametime a proper diet, and keeping the bowels rather free with the usual laxatives. The favorable effect of the medicine in the above cases, though far from impressing me with a belief in its specific powers, has yet produced a strong desire to have it farther tested.

SEELY BROWNELL, M.D.

CHICAGO, March 18, 1852.

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ART. V.—*Chloroform applied locally in Fractures and Dislocations.*

*Messrs. Editors*—PERMIT me to call the attention of the profession to the local application of chloroform to remove pain and induce insensibility of parts to be operated upon. I have made use of it for two years past as a local remedy with the most happy results. In cases of comminuted fractures, producing as it does insensibility and relaxation of parts, it enables the surgeon to overcome the resistance of muscles, and to reduce the fractures without pain or suffering to the patient. In dislocations, I have no doubt its local application would be attended with the same happy results. I have used it in a similar manner in felons, neuralgia, &c. The best mode of application, I think, is to saturate a cloth with it, apply immediately, and over that a piece of oil silk (to prevent evaporation), allowing it to remain some four or five minutes, which will be sufficient. A second application may be necessary in fractures of the superior third of the femur, or in dislocation of the same bone.

The frequent deaths reported from the inhalation of chloroform has induced me to call attention to its local use. If in the hands of others it shall prove as safe and efficient a remedy as it has in mine, I shall be amply rewarded.

H. N. HURLBUT, M.D.

CHICAGO, April 5, 1852.

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ART. VI.—*Treatment of Milk Sickness.*

*Messrs. Editors*—I WAS called to see a patient last fall, living in the region where sick stomach (as we term it) abounds, and found him laboring under obstinate constipation, and had been for some six days, vomiting almost continuedly. I pronounced the case Milk

Sickness, and directed an enema composed of sulph. magnesia, molasses and warm water to evacuate the rectum, and applied chloroform liniment over the region of the stomach, together with laudanum, poultices, &c., but to no purpose. The vomiting continued unabated. All medicines taken by the mouth were rejected immediately. Believing the vomiting to be caused by spasmodic contraction of the diaphragm and abdominal muscles, and there also being high nervous and vascular excitement, I bled the patient *ad syncope*, after which the vomiting ceased for some two hours, when I again opened the vein and took 12 oz. of blood, and administered sulphur and cream of tartar as a cathartic. The patient recovered in a few days.

Should you think the foregoing worthy, you may publish it, and in future I will give you a more detailed account of my practice in Milk Sickness. I am confident the foregoing treatment will prove successful in nine cases out of ten.

Yours truly, C. W. DAVIS, M. D.

CARLISLE, April 12, 1852.

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ART. VII.—*Dysentery.*

*Messrs. Editors:*—THE dysentery prevailed to a large extent in this region last autumn, attacking indiscriminately, from infancy to old age. I tried the various means recommended in books and journals, and used the same that was effectual in sporadic cases; gave opium and its preparations so as to produce its constitutional effects, and kept them under its influence for forty-eight hours, or more, without any good resulting. I then adopted a mixed plan of treatment, varied according to the condition of the patient, but the “general plan” was something like this: First, two or three powders, at intervals of three hours, composed of cal. and Dov. (to suit the case,) followed, by seidlitz powder, as a cathartic, and, after a sufficient evacuation of the bowels, gave a full dose of Doveri, and decoctum Hæmatoxyli, or the solution of the extract, *ad libitum*. I frequently used hot fomentations to the bowels and spts. Terebinthinæ. Under this treatment universal success followed speedily. I did not venesect, cup, leech, or blister, while pursuing the above plan. I think you will readily perceive that the means I used are those which are well suited to the pathological conditions present, and are in accordance with sound therapeutical reasoning.

Yours truly, WATERS.

April 26th, 1852.

## SELECTIONS.

From the Southern Med. and Surg. Journal.

*Report of Cases of Typhoid Fever and Typhoid Pneumonia, treated principally with Veratrum Viride.* By W. J. SUMMER, M. D., of Lexington, S. C.

SINCE the publication of Dr. Norwood's articles on Veratrum Viride, I have extensively employed it in the treatment of Typhoid fever and Pneumonia, and with the most gratifying success. I would, therefore, most cordially adduce my experience in support of the remedy, as being at once safe and efficient. Before I became acquainted with this valuable agent, I regarded the treatment of a severe case of Typhoid fever with something like dread, as to its results, but now I am less concerned about my cases of this disease, than of other affections generally deemed more trivial. A brief notice of a few cases treated with this remedy, will not, I hope, prove unacceptable to the profession, and will, perhaps, induce others to make trial of this valuable agent.

CASE I. Rebecca, aged 8, daughter of Mr. F. I was called to see her on the 5th October last. She had been suffering under the premonitory symptoms of Typhoid fever for four or five days, and the disease was now fully formed. There was headache; hot, dry skin; small and frequent pulse; tongue coated with a whitish fur, with tips and edges red and rather dry; loss of appetite, amounting to a disgust for food. There was tenderness of the abdomen in the right iliac region, pressure over which produced the gurgling noise so characteristic of this affection—no diarrhœa. I prescribed pil. hydrarg. gr. v., to be followed, if it did not act on the bowels, by castor oil. Scarified cups were applied to the abdomen—pepper poultices to be used subsequently. After the bowels were cleared, neutral mixt. with a minute quantity of tartar emetic. (I had no veratrum viride with me.)

Oct. 6th. Called and found my patient in pretty much the same condition: had two evacuations from the bowels without taking oil; headache somewhat relieved; abdomen still a little tender; pulse 130. Discontinued previous treatment, and ordered tinct. verat. vir., to be given in doses of three drops every three hours, and if nausea, emesis, or a reduction of the pulse did not take place after giving three or four doses, to increase the dose one drop each time. Pepper mush to be kept constantly applied to the abdomen.

7th. Called eighteen hours afterwards. Patient had vomited once, a short time previous; skin cool; pulse reduced to 80: the vomited matters consisted of a quantity of mucus and watery fluid. The dose of tinct. veratrum had been increased to six drops. Di-

rected it to be given in doses of four drops every four hours. At my visit next day, the patient seemed entirely free from fever—pulse 72, soft and full. Bowels had acted twice since previous visit, dejections resembled what had been vomited. The dose was now reduced to three drops, repeated at intervals of three or four hours and continued for several days, for fear of a return of the fever, after which it was discontinued. The patient convalesced rapidly.

CASE II. Henry, aged 10, brother to the above. Called 20th Oct. Found this patient with symptoms very much resembling the first, though more severe, particularly the headache. The parents had administered a dose of epsom salts, the bowels having been constipated. The salts, however, acted drastically, and diarrhœa was subsequently very obstinate. There was considerable tenderness in the right iliac region, and gurgling on pressure. Cups were applied to the temples and abdomen, followed by poultices to the latter; hyd. c. creta et pulv. Dov., in small doses, for the diarrhœa, and the patient at once put upon the use of tinct. veratrum, in small doses, gradually increased. Gum-water was the only article of drink or food allowed.

Oct. 21st. Patient complains less of headache; pulse reduced from 130 to 80; has vomited once or twice without much nausea; diarrhœa still persistent, yet the discharges are not so watery. Continue the same prescription—the veratrum in slightly diminished quantity.

22d. Diarrhœa rather worse, there being frequent watery discharges, telling rapidly on the strength of the patient; tongue dry and red, but the skin cool, and pulse only 70; no nausea. The family were averse to using the syringe, or I should have directed opiate enemata; as it was, I had recourse to acet. plumbi combined with pulv. Dov., a dose of which was given every two hours; veratrum to be continued in small doses.

23d. Patient is better to-day. Bowels have acted but three or four times in the last twenty-four hours; tongue less red and dry; pulse still about 70, full and soft; skin cool and moist; no tenderness of the abdomen, though it is still a little tympanitic. Continued same treatment.

24th. Better in all respects; diarrhœa is sufficiently checked; tongue is becoming moist and clean; abdomen more natural; pulse and skin about natural. Discontinued my visits. Next day, the pulse showing a disposition to rise; the father called on me again, and not being well enough to ride, I gave him some of the tinct. veratrum, of which he gave small doses for a few days, with the same happy results. Recovery was slow but steady and perfect.

CASE III. A negro girl, aged 7, the property of Mr. H—. Was called to her on the 6th Dec. She had been ill for more than a week previous, and the disease was now fully formed, and unusually severe. The pulse was feeble and very frequent, amounting

to 140; the tongue was quite dry and red; the abdomen tender and very much distended; diarrhæa also was present, there being from six to ten discharges daily of a watery fluid, resembling new cider. She was more or less affected with delirium, particularly at night. Scarified cups were applied to the abdomen, followed by poultices; small doses of acet. plumbi with Dover's powder were given every two hours, and tinct. verat. vir. every four hours, commencing with three drops and increasing one drop at each dose until its ordinary effects were obtained.

7th. Patient has less fever this morning; pulse 110; diarrhæa almost as bad as ever; patient rested better through the night, though there was slight delirium. Ordered in addition to the lead and Dover's powder, laudanum injections, and applied a large blister to the abdomen. The veratrum to be continued in full doses.

8th. No fever to-day; pulse 80, full and soft. Patient this morning passed about eight ounces of nearly pure blood from the bowels—blister drew well and the abdominal distention is diminished. Directed acetate lead and opium in large doses, to be repeated as often as could be well borne—veratrum to be continued in diminished doses.

9th. Patient is much better: no hemorrhage from the bowels nor watery stools; pulse 75 and natural; tongue is becoming moist and clean. Left off all medicine except veratrum, which was still to be given in very small doses.

13th. Saw this patient, and she seemed so much improved that I ceased visiting her. Directed the owner to watch her for a day or two, and if she took fever again, to resume the use of veratrum and send for me.

16th. Was summoned in haste to this patient. She had, a few hours before, been attacked with severe pain in the lower part of the abdomen, which rapidly spread over its whole extent—the abdomen was so tender as not to bear the weight of the bed-clothes without pain. The pulse was a mere thread, and so frequent as scarcely to be counted; respiration short and hurried; stomach very irritable—in short, she had all the symptoms of peritonitis, and caused, undoubtedly, by perforation of the intestines, allowing the contents to escape into the cavity of the abdomen.

I attempted the administration of large doses of opium, hoping that under its influence, in connection with perfect rest and the avoidance of all substances internally, which could in any way disturb the bowels, the system might be supported until adhesive inflammation might possibly unite the perforated intestine to the adjacent parts. But such was the irritability of the stomach, that nothing could be retained, and reluctantly I had to abandon the case as utterly hopeless. She died 18 hours after the commencement of the symptoms of peritoneal inflammation.

I regret exceedingly that I had not the privilege or time to

make a post-mortem examination; yet I am confident that the disease was, in the first place, typhoid fever, and that the fatal termination was due to perforation of the intestines, followed by general peritonitis. Equally certain am I, also, that had not perforation of the intestine occurred, this patient would have recovered.

CASE IV. Mr. S., aged 30, and of delicate constitution. I was called to him on the 4th Jan. last—he had been in bed for four or five days. I found him with the usual symptoms of Typhoid fever, in addition to which he had pain in the left side, a distressing cough, and was expectorating the rust-colored sputa, as characteristic of Pneumonia. On examining his chest, I detected inflammation involving the lower half of the left lung, and, seemingly, verging into the second stage, or that of real hepatization. His tongue was covered with a whitish fur, with tip and edges red and dry; bowels acted about twice a day, without medicine; abdomen a little full, though nearly natural; no appetite whatever. Pulse 128, and without much strength; respiration hurried and laborious.

He was already much prostrated, so I contented myself with the abstraction of a couple of ounces of blood from the side by cupping. I at once put him on the use of tinct. *veratrum viride*, in doses of eight drops every three hours, gradually increasing the dose until nausea, vomiting, or a reduction of the pulse was induced. Not feeling satisfied to trust the life of my patient to this remedy alone, (I had not used it in such cases,) I desired to employ in conjunction with it, an alterative mercurial course; but no reasoning or persuasive power of mine could induce him to give his consent. He had once been under the specific influence of mercury, and now declared that he would take no more of the subtle mineral.

5th. Patient seems in much the same condition, with the exception of fever. On increasing the *veratrum* to twelve drops, slight vomiting, without (as the patient said) nausea, was produced, and the pulse came down to 90, at which I found it. Has still some pain in the side, particularly on coughing; expectoration free, and redder and less viscid than in sthenic pneumonia. Applied a blister, 6 by 8 inches, over the inflamed lung; directed *veratrum* to be given, in full doses, until the pulse was reduced to 70, then diminished one-half, and continued.

6th. Better to-day; *veratrum* is well borne, has reduced the pulse to 68. Respiration slow and easy; cough less troublesome, and expectorates freely; no pain; blister has drawn well; tongue tremulous and pointed, but moister; bowels move about twice daily; abdomen slightly distended. *Veratrum* to be continued in doses sufficient to maintain the reduction of the pulse, and along with it, small and frequent doses of the decoction of *polygala senega*.

7th. Patient still better; feels stronger since taking the *seneka*. Pulse rather below 70, and strong enough; respiration good, though, of course, a little hurried. Continue same treatment.

9th. Patient still improving; has gained a little more strength; takes light nourishment with some relish. Blister is healing, and the solidified portion of lung is becoming permeable to air, though slowly; the cough is better, and expectoration diminished and natural. Still to take small doses of veratrum, and sulph. quinine grs. ij. thrice daily, as a tonic.

11th. Called and found the patient doing well in every respect, except that his bowels were much too irritable, there having been three or four watery discharges in the last twenty-four hours. Prescribed a combination of acid. sulph. aromat. with tinct. opii, in sufficient quantities to check the diarrhæa; the tinct. opii, then to be continued or omitted, as should be necessary; the acid to be taken freely as a tonic. The patient now improved, and has recovered without farther treatment.

One or two remarks, and I have done. It will be seen that I have not depended on veratrum viride alone, in the treatment of the cases in which I was employed, but have called into requisition other agents of acknowledged therapeutic value, and, as I believe, with better effect than could be obtained from its single action. At the same time, I am confident that without the use of this extraordinary medicine, I should, within the last few months, have lost many patients by Typhoid fever and Pneumonia—indeed, since I have learned its valuable properties, I would not know how to dispense with it. About a year ago I had a case of Typhoid Pneumonia, similar to the one above stated, which, in spite of my best directed efforts ran on to a fatal termination. Had I, at that time, been acquainted with the properties of this invaluable medicine, I have not a doubt but I could have saved this patient. Something was wanted to control the excited circulation, which was beyond my reach. Although it is not the only medicine to be depended on, it is certainly the chief one. I have used the remedy in at least a dozen cases of Pneumonia, after depletion, when that was indicated, and with a success beyond any thing I ever anticipated. With the exception of the case reported in this communication, (Case iii.) I have not lost a case in which I have used the remedy. In a general way, I have not found the medicine act harshly or disagreeably,—it is true, it sometimes makes the patient deathly sick, but its unpleasant effects are easily obviated, and after the system is fully under its influence, its unpleasant effects usually soon pass off. It is applicable to many diseases, but is particularly suited to Pneumonia. By reducing the circulation, it very materially lessens the amount of labor thrown upon the lungs; a circumstance greatly to be desired, when we remember that well established principle—an inflamed organ must have rest. I have found it to possess all the powers and properties ascribed to it by Dr. Norwood, yet I have usually found it necessary to continue it a day or two longer than he directs. I use the saturated tincture of the root.

From the Amer. Jour. of Med. Science.

*Cases of Delirium Tremens successfully treated by the administration of Chloroform.* By STEPHEN H. PRATT, M. D., of Baltimore.

CASE I. May 7th, 1850, I called to see E. B., laboring under delirium tremens.

E. B. had, that day, been taken from the ——— Infirmary, where he had been for the last seven days under judicious treatment for the above-named disease. During the time (seven days) he had not slept any, as I had been, that morning, informed by the resident physician; and his case was deemed almost hopeless. His friends became alarmed, and (very injudiciously, I thought) removed him, and placed him under my care.

It was 1 o'clock, P.M., when I saw him. He was very feeble and much exhausted by disease and protracted wakefulness. His pulse was feeble and frequent. There was subsultus, muttering, great incoherence, with cold and clammy extremities.

Having been advised that he had been on a mixed opiate and stimulant treatment, at least a part of the time, and having had some success previously in the use of chloroform, I determined to use it now. Accordingly one drachm of chloroform, diluted with water, was exhibited. At 5 o'clock, P.M., another drachm was administered; and at 9 still another, diluted as before. At 10, he fell asleep and slept till morning. At 8, in the morning, he waked and drank some gruel, after which he soon fell asleep and slept till noon.

He now waked with a good appetite, which he too freely indulged by partaking of soup. However, he was quite comfortable during the afternoon, and slept well through the night. Next morning he vomited two or three times freely. The emesis was not violent, and was easily controlled. From this time, paying strict attention to his diet, he rapidly convalesced.

During his sickness no medicine was exhibited but chloroform (not even aperients), and this but three times. On the fifth day, the patient left the house to attend to his affairs, and was soon in health.

CASE II. Was called to see J. H., June 4th, 1851, laboring under delirium tremens. Put him upon a mixed opiate and stimulant treatment through the day, and exhibited opium in full doses through the night. This was continued two days and nights, without benefit. Indeed the patient grew worse. The third morning I put him upon: R. Spts. sulph. ætheris comp. tinct. valerianæ, ana 3 iss.; to take 3ii. every two or three hours, intermediately giving tinct. opii. At 8 P.M., gave a large opiate. At 10 P.M., gave tinct. opii. 3j. At 12, repeated the dose; and at 2, again repeated it. All this time the patient grew worse, and became "furiously delirious," frightening all the household.

Three men were appointed to prevent him from jumping out of the windows (several attempts at which he had made), or otherwise injuring himself. At times he was a match for them all. At length he grew weak, becoming more and more prostrated by his great exertions. The family became alarmed, and wished further advice. A consulting physician was called in. A hot stimulating pediluvium and an opio tartar emetic treatment was agreed upon.

I suggested chloroform internally, which was not wholly objected to, though not preferred by the consulting physician. Accordingly the former was tried, but unfortunately without success, the patient rapidly growing worse.

He was now beyond control, a raving maniac, a terror to all present. His pulse was feeble and frequent; so frequent it could not be counted with the existing tremor. His tongue was dry; there was also muttering, subsultus, and perfect incoherence, with cold and clammy extremities.

Under these circumstances, I determined to exhibit chloroform as a dernier resort. A tea-spoonful nearly, diluted with water, was administered. After one hour, the following was given: R. Spts. sulph. ætheris comp. tinct. valeriana, aa f 3 ii., chloroform f 3 i., at a draught.

(The compound spirit of sulphuric ether and tinct. valerian were added in order to obviate, if possible, the danger of fatal prostration.) Fifteen minutes after its exhibition, the patient fell asleep, and slept soundly three and a half hours. Meantime, perspiration ceased; his extremities became *warm*; and his pulse grew *calmer, fuller and firmer*. He then awoke much refreshed and quite rational, and had a free, natural dejection.

Three tea-spoonfuls of the mixture, R. Hoff's anodyn. and tinct. valeriana, with half a tea-spoonful of chloroform, were then exhibited. After this, he washed his hands and face, and bathed himself generally. In one hour, I exhibited f 3 iv. of the mixture, with f 3 i. of chloroform, and persuaded him to lie down. In a few minutes he was asleep, and slept comparatively soundly four hours, when he arose, went down stairs, and evacuated his bowels. In fifteen minutes he was again asleep, and slept three hours, when he waked and drank a tumbler of milk, took a dose of spts. sulph. ætheris comp. and tinct. valeriana; fifteen minutes afterwards he was asleep again, and continued sleeping through the night, rising, meantime, but once.

In the morning he rose, drank some milk and beef tea, and after evacuating his bowels again went to sleep. His pulse was now good; extremities warm, glowing; subsultus greatly diminished; delirium almost entirely wanting. He slept till about noon, and then waked still more tranquil. During the afternoon, he slept and waked alternately, and rested well the following night. His sleep was not comatose. When awake, he was wide awake, cheer-

ful and lively. A day or two passed thus as he rapidly convalesced. On the 9th, he was walking about the city a comparatively well man. He has continued well since.

Such are the facts. From a furious delirium, with subsultus, perfect incoherence, cold, clammy extremities, a feeble, fluttering, frequent pulse, costiveness, &c., by the tranquilizing and peculiar (shall I say specific?) influence of chloroform, he was *rescued*, in a little more than an hour, and thrown into a condition the most favorable possible; from which in a few days, he was restored to his usual health. No emesis, or irritation of the bowels, occurred. No cathartics were exhibited, yet gentle motions followed the administration of chloroform.

The methodus medendi of this wonderful agent, I will not here attempt to explain. Facts are of more importance than inferences, and if, by this contribution, I add one to the *facts* already recorded, I shall be satisfied.

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From the American Journal of Medical Science.

*Report of three Cases in which Lactation was reproduced by the application of the Child to the Breast.* By ARIEL BALLOU, M. D. (Read to the Rhode-Island Medical Society.)

CASE I. In the autumn of 1836, Mrs. J. G., aged between thirty and forty years, of sanguine temperament, robust constitution, and the mother of several children, was confined. The presentation was natural, and no unusual circumstances attended her delivery. Subsequently she suffered from an attack of phlegmasia dolens in both of the lower extremities, attended with high febrile action, and, as is usual in such cases, extreme suffering. The secretion of milk ceasing early in the disease, the child was removed to a wet nurse, with whom it remained three or four months, during which time there was no return of milk. In the spring of 1837, the family being about to move a short distance from the village, where they could enjoy a better air and a more unrestricted exercise, the mother was anxious to take her infant with her, but did not like to deprive it of the advantages of the breast during the then coming warm season. I advised the mother to take her child and apply it to the breasts in the same manner she would do, if she had a flow of milk, assuring her it was my confident opinion that in two or three weeks she would have milk, and a sufficient quantity, at least her usual supply.

She did so, and in about two weeks the secretion of milk was reproduced. She continued to nurse her child for more than a year, producing her accustomed quantity of milk.

CASE II. Mrs. N. D., aged about twenty-five years, was confined in December, 1841. Nothing worthy of note transpired during her confinement and recovery. In April following her child

weaned itself, in consequence of a sore mouth. Her milk soon entirely disappeared. In July following I was called to see her child, which was suffering from an attack of cholera infantum. Having lost several children about that time from this disease, I expressed my regret that the child was deprived of the benefits of the breast, adding, that in my opinion its chances of recovery were diminished in consequence.

The mother was informed of the course I had advised in other cases where it was desirable to reproduce the secretion, and of the results. On my visit the succeeding day, she informed me that she had applied the child to the breast, and that it nursed and seemed pleased and more quiet; but she was not aware that any milk was obtained, or that she had any for it. I advised her to persevere in the application of the child to the breasts, which she did, and the child recovered, and in the course of a week or ten days obtained a full supply of nutriment from the breasts.

The mother continued to nurse for months, with as full and perfect a secretion of milk as though no interruption in the secretion had occurred.

The following case I report as having an important practical bearing on the treatment and disposal of a class of cases which occur in our community at the present day, to cure which or otherwise dispose of satisfactorily to the physician, is often found difficult.

CASE III. Mrs. O. H. H., aged about twenty-one years, of feeble constitution and nervo-lymphatic temperament, was confined in July, 1847. Previous to her accouchement she was troubled with chronic aphtha, red canker, or with that condition of the system which is well known as "sore mouth attendant on pregnancy and lactation." Nothing unusual occurred at the time of delivery. No considerable loss of blood was sustained. As in similar cases, there was a remission of diarrhœa and sore mouth for a few days after accouchement, giving rise to a hope that, being relieved from the condition of pregnancy, she would recover the powers of digestion and the assimilation of nutriment so as to enable the system to sustain the calls upon it consequent to lactation. But in the course of ten or twelve days after accouchement the sore mouth and diarrhœa returned with increased violence, producing great debility. The secretion of milk was copious. Her pulse 120; the tongue flabby; there were frequent dejections of yellowish water, the face and extremities bloated, &c. Fearing the worst results for my patient, I advised the immediate removal of the child from the breasts of the mother to those of a wet nurse, at the same time informing the parents that on the recovery of the mother she could at pleasure reapply the child to the breasts and have a full supply of milk, and be enabled to perform all the duties and functions of a mother for an indefinite period of time.

The child was given in charge of a wet nurse, the milk gradually disappeared and the patient recovered under the use of tonic remedies and a generous diet. Between two and three months after this the mother called on me, having the appearance of restored health, and inquired if she might now take her child home with a hope of realizing my former assurances that she would be able to reproduce her milk. I assured her there was no doubt in relation to such a result, and her ability for the future to nurse her child. She took the child, applied it to the breasts, and in the course of two weeks had a good supply of milk.

I met her some nine months after, when she informed me she was happy in the enjoyment of good health, and, to use her words, she "had as good a breast of milk as if she had never dried it up."

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From the London Lancet.

*Case of a Large Sub-Cutaneous Nævus Cured by Vaccination.* By JOHN WOOLCOTT, Esq., M.R.C.S., Surgeon to the Kent Ophthalmic Hospital.

A LADY brought to me her infant, a healthy looking child, nine weeks old, in January, 1848, with an extensive sub-cutaneous nævus which had existed from birth. The tumor, which was of a blue, livid color, occupied the whole of the upper eyelid and a small portion of the root of the nose on the right side, and extended upwards upon the brow and forehead as high as the upper border of the orbicularis palpebrarum muscle; outwards and downwards it reached nearly to the tragus of the right ear, and then extended upwards and inwards along the lower margin of the zygomatic process of the temporal bone to the external angle of the orbit, where it joined the morbid product at the upper eyelid; there was no pulsation in the tumor; it was soft and compressible, and increased greatly when the child cried, and it then assumed a dark purple color; pressure on the temporal arteries did not diminish its bulk. The application of ligatures in this case was of course inadmissible, on account of the deformity which would arise from cicatrization of the wound causing ectropium.—The treatment for the first month consisted in the application of tincture of iodine; the abnormal growth being freely punctured all over with a fine cataract needle, and the iodine applied over the punctures. The bleeding was considerable, and of arterial character, but it soon subsided on the application of the iodine. These punctures were made twice a week, but the iodine applied daily, except when it caused too great irritation and soreness of the skin, when it was discontinued for a day or two, and then resumed. At the end of the month, the disease remaining undiminished, I altered the treatment and applied vaccine lymph: with a lancet armed with the matter, punctures were made at

short intervals all around the circumference of the tumor, and several points in the centre of it; to ensure its taking, I inserted into each puncture a bone-point, also well-armed with vaccine lymph; most of these punctures took, and the irritation they caused was considerable, the child's face and head being swollen enormously. This was attended with fever and much constitutional disturbance, but at the end of a fortnight it had somewhat abated, and at the end of a month the disease was evidently decreasing; and at the expiration of six months from the vaccine lymph having been used, not the least swelling existed, and the skin was assuming its natural color. I saw the child the beginning of January, 1852, and not a vestige of the morbid structure remains; and it was only by looking closely for the vaccination scars, that I could tell on which side the naevus had been. I have treated several cases in the same way at the Kent Ophthalmic Hospital, and have succeeded in arresting their growth, but I have never seen so large an erectile tumor cured by this treatment, nor can I remember to have read of any such case. The color of this vascular tumor was venous, the bleeding was arterial.

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From the Southern Medical and Surgical Journal.

*Cold Water in Puerperal Convulsions.* By G. W. BOOTH, M. D., of Carrollville, Mississippi.

In the year 1848, I was called early one morning to see Mrs. E. W., wife of P. W. On my arrival, I was informed that she had been in labor for several hours. She was about 18 years of age, short stature, and of ruddy appearance. This was her first pregnancy, and I was informed by the old midwife who was in attendance that the labor appeared to progress favorably till a short time before I was called in. The patient's friends had discovered some convulsive twitchings about her face which alarmed them, and I was consequently summoned.

The waters had been discharged sometime before I saw her.— On examination, I found the head at the inferior strait presenting naturally, and the soft parts in a favorable condition. The pains appeared to be effective. Soon after I made an examination, the muscular twitchings about the face deepened into the most terrific general convulsions I have ever witnessed. She was delivered in a few minutes after the accession of the convulsions, of a fine healthy girl, of average size. I was in hopes, after this event, that some mitigation, at least, would take place in the symptoms. In this, however, I was disappointed, as the convulsions continued to recur as before. She remained perfectly unconscious, from the first severe paroxysm, throughout the course of the disease. I

put into vigorous play all the usual remedies for this formidable disease, but without influencing it materially. I continued this treatment till late in the evening. I now despaired of the patient's life, and announced the fact to her husband and friends. As a dernier resort, I determined to try the effect of cold water, applied by pouring it freely over the whole system. To carry this treatment into effect, I had her taken from the bed and laid on the floor, with a quilt under her and a sheet thrown over her body. I then, from a large pitcher, poured water, fresh from a well, over her, from head to feet, for several minutes. After the application of the water, I had dry clothes put on the patient, and she was replaced in bed. In the course of half an hour after this she awoke from the stupor, which had existed since morning, perfectly rational, and had no return of convulsions after the water had been used. She now had no recollection of anything that had taken place since her first convulsion, and appeared to be surprised to learn that her child was born.

There was inability to pass off her urine, and I drew off a large quantity with a catheter—the state of her bladder having been unattended to in the earlier part of her labor. I used the instrument but once, as she was able afterwards to evacuate the bladder without its aid. She had a fine “getting-up,” and was as well in a few days as is common after the most favorable labors.

Mrs. W. has borne two children since, without any untoward circumstance attending either labors.

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From the London Lancet.

*Causes of Albuminous Urine.*

M. ED. ROBIN lately read a paper on the above subject before the Academy of Medicine of Paris; we subjoin an extract of the same:—In the normal state the albumen is burnt in the blood, and the nitrogenized residue of this combustion—viz. urea and uric acid, is eliminated by the urine. The combustion is, however, not so complete as not to allow some little albumen to escape with the renal secretion; but this albumen, besides being very small in amount, is somewhat different from the ordinary kind. M. Robin thinks that if during a sufficiently long time the albumen underwent in the circulation a much smaller amount of combustion than is habitually the case, it might pass unaltered into the urine, instead of being thrown off in the form of urea and uric acid. The author cites the following facts in support of his opinion:—

The urine becomes albuminous in croup, in complete ascites, and in cases of capillary bronchitis, with emphysema, accompanied with much dyspnoea; in pulmonary phthisis, especially when complicated by pneumonia and marked with difficult breathing; in gestation, when sufficiently advanced to occasion an habitual congestion

of the kidneys, owing to an impeded abdominal circulation; and in such states of the system in which a very incomplete respiration causes a marked diminution of combustion. The urine is also albuminous in cyanosis, of whichever nature it may be; in affections of the heart, when they exist in such a degree as to keep the patients in a state of semi-asphyxia; and, of course, in such cases where an obstacle to the circulation of the blood, or a malformation of the heart, prevents the hæmatosis from being as rapid as under ordinary circumstances. The urine is likewise albuminous in idiopathic or traumatic lesions of the nervous centres, which cause a lowering of temperature, and thereby a marked decrease of combustion; in diabetes, a disease where very often a lesion of the nervous centre seems to be the *origo mali*; where the great abundance of sugar in the blood seems to be an obstacle to the combustion of albumen; and where finally the natural heat is lowered by one or two degrees with patients who are severely affected. The urine is albuminous in that kind of nervous exhaustion which characterizes the state of frame called lumbago, which exhaustion must be connected with a great diminution of calorification, and slow combustion. The urine is likewise albuminous in consequence of severe exposure to cold of a large surface of the body. Finally, Bright's disease, where the urine is always albuminous and anæmic, is especially attributed to many of the causes which have been above enumerated as capable of exciting the passage of albumen into the urine.

The author continues by stating that some useful data may be obtained from comparative physiology. As a general rule, the urine of the common mammalia and of birds contains no albumen. Among reptiles, on the other hand, the batrachia, so remarkable for the low temperature of their animal heat, yield urine in which albumen is always to be found. It now remains to be proved, says M. Robin, that the urine becomes albuminous under the influence of such agents as interfere in a marked degree with slow combustion. The author then adduces the following conclusions:—

When the activity of the combustion which takes place in the blood is too feeble to burn the whole of the albumen which, in the normal state, should be consumed in a given time, the general vitality is diminished, and thus more or less albumen is allowed to pass unaltered into the urine,—viz., just so much organic matter as escapes the transformation into urea or uric acid. The proportion of urea contained in albuminous urine should, therefore, be smaller than it is found in normal urine, and such is found to be the case in the following diseases, the only ones, according to the author, in which experiments have been made—viz., pulmonary phthisis, diseases of cerebro-spinal axis, extensive and acute bronchitis with intense dyspnoea, and Bright's disease.

From the Gazette Med. de Paris.

*Treatment of Asthenic Dropsy by the Preparations of Nux Vomica.* By TESSIER.

SEROUS infiltration of paralyzed limbs is dissipated with the paralysis; and paralysis is sometimes cured by nux vomica. This medicine does not act alone on the nerves of the life of relation, but also on those of organic life, since it causes the intestines to contract, and hence constitutes an excellent remedy for constipation caused by inertia of the digestive tube. Could not the same medicine be made to act upon the absorbent vessels, and communicate to them greater activity, and thus cause the resorption of those effusions connected with a general or local asthenia? This question was proposed by M. Tessier, and his experience, seconded by other authority, has decided the question affirmatively.

Five cases of this kind have been reported by M. Tessier, all of which are significant and conclusive on the subject. In the first, there was œdema of the lower limbs, succeeding a case of diabetes, cured by liquid ammonia. At the end of a month, there existed no trace of swelling, but the diabetes returned. The treatment by ammonia was resumed, and the diabetes again disappeared; then the œdema returned, which was once more treated by nux vomica, and was the second time cured. The second was the case of an individual much enfeebled by imperfect nutrition, and suffering from considerable œdema of the lower extremities, and incipient ascites. Nux vomica was employed, and at the end of eight days there was evident improvement; and by the 25th day the cure was complete. The third was the case of a military man, affected with ascites and œdema of the inferior extremities, the result of an intermittent fever; both quinine and ferruginous preparations had failed. The nux vomica was then administered, and the cure was so far advanced at the end of eight days, that the patient regarded himself cured, and left the hospital. Finally, says M. Tessier, the fourth case was one of œdema of the legs, succeeding an attack of typhoid fever, which left the patient greatly enfeebled, but which was cured in five days. He gave the nux vomica in doses of 2 and 5 centigrammes daily.

It is scarcely necessary to remark, that M. Tessier relies upon this medicine only in purely asthenic dropsy. Of course it must fail when any material obstacle is offered to the passage of the blood through the venous trunks.

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From the London Lancet.

*Iodine Injections into the Peritoneum in Ascites.*

WE have already spoken at some length, but very guardedly, of M. Boinet's method of treating ascites; injections of iodide of potassium and tincture of iodine into the cavity of the peritoneum,

seem, *prima facie*, measures of a very hazardous kind; but we now find that M. Boinet has published, in the *Gazette Medicale de Paris* (No. 47, 1851,) an account of thirteen cases, wherein he has used such injections with perfect success as to eleven of these; the two remaining cases, though unsuccessful, not presenting any further unpleasant symptoms than the persistence of the ascites. Though the febrile reaction never ran high, the injections were in general followed by tension and some heat of the abdomen, a little tympanitis, and tenderness on pressure. In two or three cases there were slight symptoms of peritonitis, and in one case, intense inflammation of the peritoneum. The fluid was generally left four or five minutes, and it has even happened that from difficulty of evacuating it, one fourth, one half, or even the whole, was left without producing unpleasant symptoms. Of course, the treatment will only apply in cases of idiopathic affection of the peritoneum, unconnected with organic disease. The injection should be composed as follows: water, seven ounces; tincture of iodine, one ounce; iodide of potassium, one drachm. The injection must never contain more than a sixth or seventh part of iodine.

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From the London Med. Gazette.

*Substitutes for Mercurials in the Treatment of Syphilis.*

M. ROBIN read before the Academy of Medicine, Paris, a note on this subject, followed by a recital of the researches of M. Vicenti, also on the same question.

In a previous communication, M. Robin had enunciated the idea that mercurials do not exert any particular mode of action upon syphilitic disease, except in combining with the virus, and converting it into a new and inert compound. Many other substances, M. Robin had stated, possessed the same powers—*e. g.*, preparations of arsenic, gold, silver, iron, and antimony, and therefore might advantageously replace the mercurial medication.

With this view, M. Vicenti had, at the request of M. Robin, studied experimentally the action of bichromate of potash. The following is a summary of the results:—

1. That the bichromate of potash possesses, most undoubtedly, anti-syphilitic properties, more active and energetic than mercurial preparations.

2. That in the three cases in which it was administered no ill effects followed. The nausea occasionally excited is readily allayed by opium.

3. That being soluble the bichromate is rapidly taken into the system.

4. That the bichromate of potash may advantageously replace mercurials in the treatment of syphilis.

From the London Lancet.

*The Itch cured in two hours.*

DR. BAZIN, Physician of the Hospital Saint Louis, of Paris, introduced not long ago, a notable improvement in the treatment of the itch, since he succeeded in curing the disease in *two days* by general frictions with the sulphur ointment. Dr. Hardy, who succeeded Dr. Bazin in the Scabies wards of the same hospital, has, however, considerably curtailed this already short time; he cures his patients in *two hours*. The method is described as follows:

Patients are no longer admitted *into* the house for the treatment of the itch, as two hours suffice to render contagion impossible and the recovery almost certain. The patient is put into a warm bath, and rubbed for an hour with yellow soap; he then passes into a clean bath, where he continues to cleanse his skin for another hour. After leaving this bath he is taken to a particular room fitted for the purpose, and, with the aid of one of his fellow-sufferers, he is rubbed all over for half an hour with the following ointment: Axunge eight parts, flour of sulphur two parts, carbonate of potash one part. After this friction, the patient is examined and sent away cured, though sometimes pretty numerous vesicles on the hand and elsewhere, remain unaltered. Dr. Hardy states that out of one hundred cases he has hardly had two or three relapses. The number of itch patients had considerably diminished, as none are now turned away for want of room; and the disease has thus spread with much less rapidity.

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From the Edinburgh Monthly Journal.

*Rules for Bleeding in Pneumonia.*

THE following judicious remarks by Dr. Bennett, are perfectly in accordance with our own experience:

"If we are called to a case at a very early period, before exudation is poured out, and before dullness as its physical sign is characterized, but when, notwithstanding, there have been rigors, embarrassment of respiration, more or less pain in the side, commencing crepitation, then bleeding will often cut the disease short. This state of matters is rarely seen in public hospitals. When, on the other hand, there is perfect dullness over the lung, increased vocal resonance, and rusty sputum, then exudation blocks up the air-cells, and can only be got rid of by that exudation being transformed into pus, and excreted by the natural passages. In such a case bleeding checks the vital powers necessary for these transformations, and, as a general rule, if the disease be not fatal, will delay the recovery. I believe this to be the cause of so much mortality from pneumonia in hospitals where bleeding is largely practiced, for, in general, individuals affected do not enter until the third or fourth day, when the lung is already hepatized.

## EDITORIAL.

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*To the Profession.*

THIS being the first number of a new series of the *North Western Medical and Surgical Journal*, it seems the proper time for its present editors to make a brief exposition of their plan for its future publication, in order that its readers may know what to anticipate hereafter from a periodical which, under the superintendence of its recent able editor has already acquired character, the prospect of permanence, and a large number of patrons.

The change from a bi-monthly to a monthly journal, has been made in compliance with the expressed wishes of a large number of its patrons, and in order that its readers may receive oftener and more promptly notices of new discoveries and other interesting and important medical intelligence.

Each number will contain hereafter communications, selections, and editorials in the order as above named.

The part devoted to ORIGINAL COMMUNICATIONS will be made up of reports of interesting cases, important facts observed, and other matters of interest to the practitioner, such as will be furnished by the numerous contributors to this journal in various parts of the great North-West; who will doubtless continue their favors without further solicitation, knowing, as they must, that it is upon them that we rely principally for the means of rendering this department useful and interesting to physicians.

In making SELECTIONS, especial regard will be had to the wants of practitioners, and to the importance of well established facts as compared with mere hypotheses and theoretical opinions. In addition to extracts from American and English medical journals, the eclectic department will contain also, from time to time, translations from French and German periodicals.

Under the head of EDITORIALS, will be included all reviews, notices, and abstracts of recently published books, papers, and periodicals, in which it will be the object of the editors to give, frequently, in addition to a brief synopsis of their contents, facts and information derived from other sources, which may have a bearing upon

the subject under consideration. This department will contain, also, short accounts of the proceedings of medical associations and societies, and all other interesting medical intelligence of whatever nature; and, finally, the results of the investigations and observations made by the editors themselves, for which the two hospitals now open in Chicago, furnish unusual facilities.

Believing as we do, that this, the oldest medical periodical in the North-West, will, if conducted upon the above plan, continue to receive the patronage and support of north-western physicians, we renew our editorial labors in confidence and with bright anticipations for the future.

H.

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*Apology.*

WE regret that on the occasion of our first introduction to our readers, we are obliged to appear under such an awkward caption; but "time and chance happeneth to all men." The new type promised in the prospectus for the present volume was ordered early in March, but, for unforeseen reasons, was delayed five or six weeks. Our printers insisted on a new dress, and the result is, that the present number will reach our subscribers about three weeks later than it should have done. We hope, however, the above will be considered a sufficient excuse. Hereafter we will be punctual in our monthly visits—to those of our friends who will set the example by being prompt in their remittances.

J.

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*Ninth Annual Report of the Managers of the State Lunatic Asylum of the State of New York.*

THIS document shows the continued prosperity and usefulness of this, the largest institution for the insane in our country.

The number of patients in the Asylum at the commencement of the year was 429, and there were admitted during the year 366, making a total of 795.

There were discharged during the year, 360: of which number 112 were cured; 15 much improved; 51 improved; 134 unimproved; and 48 died;—leaving in the institution at the close of the year, 435 patients.

The most important suggestion of the managers and superintendent that we note, is a recommendation that the plan of heating and ventilating the establishment be entirely changed.

In the number of this Journal for January last, we noticed the abandonment of the system of forced ventilation, which had been provided for in the erection of the Indiana Hospital for the Insane, and expressed our regret for the move, regarding it as a positive retrogradation. Our conclusions are strengthened by the document before us, in which a system of precisely the same character is proposed to be introduced at great expense in this establishment, which had been erected before the system was introduced into this country.

In reference to it the managers say :—

“ With the improved mode of warming by steam, can and should be connected a better and more effectual plan of ventilating the asylum buildings, an improved mode of ventilation is much desired. Experience has shown that the method originally adopted of ventilating by small upward ventilating flues in the partition walls, is inadequate to accomplish the object intended. It is ascertained that some artificial or forced ventilation is necessary to render the atmosphere in public buildings of this character pure and perfectly healthful, and that the means of ventilation should be under such control and regulation that they can be adapted to the various changes of the weather; much greater ventilation being required in some states of the atmosphere than in others. Their forced ventilation can be most advantageously secured by connecting the ventilating flues, from the various rooms of the house with the flue of the chimney which is heated by the fire, by which the building is warmed, thus creating a strong downward draft in the ventilating flues, and which draft may be regulated by registers over the opening flues in the rooms.”

The able superintendent, Dr. Benedict, has recommended this plan, and urged it upon the managers, and through them upon the Legislature of the State.

E.

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*Illinois State Medical Society.*

WE trust our readers will bear in mind that the Illinois State Medical Society will hold its third annual meeting at Jacksonville, commencing its session on Tuesday, the first day of June, proximo, and that many of them will attend.

Its meetings heretofore have been highly entertaining, and we

have no doubt that the approaching one will be equally, if not more, interesting. We hear of many who design attending, and of a prospect of much important business to come before the Society.

Now, friends, why not break loose from your domestic and professional cares and anxieties for a few days, and attend the meeting; visit Jacksonville, one of the most beautiful and pleasant spots in the State; see its numerous State and other public institutions; enjoy its intelligent and generous society; meet your professional brethren from different parts of the State, and extend your acquaintance among them; participate in the deliberations of the Society, and endeavor to improve the profession and yourselves?

If you will, we will guarantee you will not regret it, and also that you will return to your daily round of duties refreshed and invigorated, and on better terms with yourselves and your neighbors than you will be if you remain at home. E.

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*Bird on Urinary Deposits.—Frick on Renal Diseases.*

THE chemico-physiological investigation of the urine has added much to our knowledge of pathology; we propose, therefore, to present in a condensed form some of the more practical conclusions arrived at in the works whose titles form the caption of this article.

It has been pretty well ascertained that the function of the kidneys is, primarily, to eliminate from the system the effete nitrogenized compounds; and, secondly, to act as emunctories for carbonaceous substances in case of the torpidity of other organs.

The solids of healthy urine, consisting of urea, uric acid, inorganic salts, coloring matter, and a few other substances, are derived mainly from the metamorphosed albuminous tissues. The amount of each of the solid constituents is subject to but slight variation, without indicating positively diseased action, while the quantity of water, the average being from 30 to 40 fluid ounces daily, may be largely increased by the quantity or quality of the fluids taken into the stomach, or by a suppression of the cutaneous exhalation, and still not be considered as abnormal; the amount of water may also be very much diminished by accidental circumstances, and still not be incompatible with health.

The specific gravity of urine varies during the day; that passed

in the morning, before eating—the urine of the blood—being less than that passed after eating—the urine of the food; the average for the 24 hours being nearly 1.021. If the same amount of solids be excreted in the 24 hours, it is evident that the specific gravity will be increased by a deficiency, and decreased by an excess in the quantity of water. We cannot be too careful, therefore, in drawing inferences from the quantity of fluid or from its specific gravity alone. As a general rule, if the variation from the normal standard of the specific gravity be inversely as that of the quantity of water, disease is not indicated.

A suppression of the cutaneous exhalation is one of the most frequent causes producing change in the quantity and quality of the urine. The water of the blood, usually passed off from the surface, is turned inward and finds an exit from the system through the kidneys, carrying with it the solids, amounting to about 107 grs. daily, that should have been excreted by the skin, and producing in the urine an excess of the urate of ammonia which disappears as soon as the determination to the surface is restored.

A similar condition of the urine may be produced by taking into the stomach a large amount of indigestible food which, instead of being perfectly assimilated and passing off as healthy urine, is converted into uric acid and urate of ammonia.

The following extract from Dr. G. Bird, presents in a concise form the pathological indications of this diathesis:

“Whenever an excess of uric acid or its combination with bases occurs in the urine, a normal quantity of water being present (30 to 40 ounces in twenty-four hours), it may safely be inferred that one or other of the following states exist:

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|---|---|---|
| A. Waste of tissue more rapid than the supply of nitrogenized nourishment, as in                          | } | Fever, acute inflammation, rheumatic inflammation, phthisis.  |
| B. Supply of nitrogen in the food greater than is required for the reparation and supply of tissue, as in | } | Excessive indulgence in animal food, or the quantity of food remaining the same, with too little bodily exercise. |
| C. Supply of nitrogenized food not being in excess, but the digestive functions unable to assimilate it.  | } | All the grades of dyspepsia.  |

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|--|---|--|
| D. The cutaneous outlet for nitrogenized excreta being obstructed, the kidneys are called upon to compensate for the deficient function. | } | All, or most stages of diseases, attended with arrest of perspiration. |
| E. Congestion of the kidneys, produced by local causes.  | } | Blows, and strains of the loins, disease of genital apparatus.         |

An excess of uric acid, or urates, may then exist without indicating any serious derangement requiring the aid of medicines; on the other hand it may point to a dangerous difficulty, requiring active interference; and this can only be determined by an attention to other symptoms, such, for instance, as the presence or absence of the general symptoms of inflammation; the quantity and quality of the food; the condition of the digestive organs; the state of the skin; and the existence or non-existence of the usual signs, indicating disease of the genital or urinary organs.

The treatment, in cases where any is necessary, must be determined by the pathological indications, remembering always that the abnormal condition of the urine is not *the disease*, but simply the *evidence* of disease.

Urate of ammonia is readily distinguished by its perfect solution on the application of heat; and, if the microscope is used, by its amorphous, granular appearance; and, on the addition of hydrochloric or nitric acid, by the formation of uric acid crystals.

Phosphoric acid in combination with earthy or alkaline bases, is one of the constituents of healthy urine. These salts are derived from food, and from the albuminous tissues, which, during the process of disintegration, yields them in large quantities. Their presence in normal proportions in healthy urine, gives rise to no deposit, but in disease they often accumulate so as to alter the sensible properties of the secretion. The following extracts are from Dr. Bird's work:

"Deposits of these salts are always white, unless colored with blood; soluble in dilute hydrochloric acid, and insoluble in ammonia or liquor potassæ. On heating the urine, the deposit undergoes no further change, except agglomerating into little masses. Mucus, pus, and blood, are often present in the urine, and mask the chemical characters of the deposit."

"The physical appearance presented by the deposits of the earthy phosphates varies extremely; sometimes, especially when

the triple salt forms the chief portion of the deposit, it falls to the bottom of the vessel as a white crystalline gravel. If but a small quantity of this substance be present, it may readily escape detection by remaining for a long time diffused through the urine; after a few hours' repose, some of the crystals collect on the surface, forming an iridescent pellicle, reflecting colored bands like a soap-bubble or a thin layer of oil. If then, the lower layers of the urine be placed in a watch-glass, and held obliquely over the flame of a candle or any strong light, a series of glittering points will become visible from the reflection of light from the facets of the minute prisms of the salt.

"The phosphates will often subside towards the bottom of the containing vessel like a dense cloud of mucus, for which they are frequently mistaken. Not unfrequently they will, in very alkaline urine, form dense masses in the urine, hanging in ropes like the thickest, puriform mucus, from which it is utterly impossible to distinguish them by the naked eye. Their disappearance on the addition of hydrochloric acid will at once detect their true nature. Where, as frequently occurs, a large quantity of ropy mucus, pus, or blood, co-exist with the phosphates, no mode of investigation can be so satisfactory as the examination of a few drops of the urine between two plates of glass, by the microscope, when the characteristic crystals of the phosphates are readily recognized."

The pathological indications of the triple phosphates are given by Dr. Frick, in the following paragraph:

"When these salts exist in the urine as a deposit, they are usually indicative of serious disturbance, and often of organic disease, unless they have occurred as a result of decomposition. But to this there are exceptions; for instance, medical students, or those who breathe for any length of time an atmosphere charged with ammonia, are liable to suffer with a deposit of this salt in their urine. It has also been observed in convalescence from acute disease, and in some cases of indigestion. But with these exceptions, it is most often found associated with a calculus in the bladder, or some organic mischief of that organ or the kidneys. There is always co-existent with the presence of this salt in the urine, a depressed state of nervous energy, sometimes local only, but at others general. For instance, we find it frequently in persons who are old and infirm, or in those who have received some blow or strain over the loins. The general symptoms are those which are consequent upon depressed nervous energy, and almost all persons suffering with this condition of urine, are regarded as laboring under hypochondriasis, or severe dyspepsia."

The indications for treatment, as is evident from the above, are varied; the difficulty being sometimes local and sometimes consti-

tutional. The use of acids, especially the organic, have a tendency to maintain an acid re-action of the urine and thus secure a complete solution of the earthy salts; but, as Dr. Bird remarks, "all that is effected by such treatment is to mask a symptom, and an important one, of the progress of the malady." Cases in which the phosphates form deposits in the urine are divided by Dr. B. into four classes, "the existence of one or other of which must be deduced from the symptoms presented by the patient:

- "A. Cases in which dyspepsia, often to an aggravated extent, with some febrile and nervous irritation, exists independently of any evidence of antecedent injury to the spine.
- "B. Cases characterized by high nervous irritability, with a varying amount of marasmus, following a blow or other violence inflicted on the spine, but without paralysis.
- "C. Cases in which the phosphatic urine co-exists with paraplegia, the results of spinal lesion.
- "D. Cases of diseased mucous membrane of the bladder."

The first and fourth of these classes are frequently met with, in the latter of which Dr. B. has found much benefit to result from acid injections, by which the bladder was freed from the phosphates incrusting it. The treatment, however, of each class must be directed by general principles, rather than by specific rules.

Oxalate of lime is a salt so frequently found in the urine, and so often associated with disease, of which it furnishes one important indication, that it requires some notice.

Dr. B. first called the attention of the profession to this deposit. In his work he discusses somewhat at length its origin, and concludes that, except in cases where it has been taken into the system,

"It can only be referred to the same source as the accompanying urea and extractive matters, (which are always in excess,) viz.: an exaggerated activity of the second stage of the secondary or destructive assimilation, the metamorphosis of tissue of Liebig."

On this hypothesis he accounts for the emaciation almost always present in this diathesis. Its detection requires the aid of the microscope. The therapeutical indications are, to correct any disordered condition of the digestive organs, and restore as far as possible the general health; to avoid all depressing influences; to use a carefully regulated diet, consisting of animal and vegetable

food in about equal proportions; and, in addition, the persistent use of the nitro-muriatic acid, in the proportion of about two parts of the latter to one of the former, and eight parts of water; of this mixture from ten to twenty drops may be taken in sweetened water 3 or 4 times daily.

The dumb bells, which till recently have been considered oxalates of lime, are believed by Dr. Bird to be an oxalurate of that base, while Dr. Frick maintains that they contain no lime, but are modified uric acid crystals, perhaps undergoing chemical changes,—a proposition which, in our judgment, requires proof. Dr. B. has demonstrated by chemical analysis the existence in the dumb bells of lime, and the microscope of Dr. F. has not demonstrated its non-existence.

The organic substances of the most importance in the urine, are mucus, pus, blood, sugar, and albumen, the latter of which is interesting from its frequent connection with organic disease of the kidneys.

The detection of albumen is easy, being simply the application of heat and the addition of nitric acid, either of which alone should, if albumen be present, produce a white, flocculent deposit. Alcohol produces the same result.

During the last year, there have been admitted two cases into the Ill. Gen. Hospital, and one to the U. S. Marine Hospital, with the urine charged with albumen. In two of the cases fibrinous casts of the tubuli were found. One died, and two were discharged apparently cured. One of the cases discharged was reported in this Journal—the other was treated mainly with cod liver oil and phos. lime. He improved rapidly in strength and general appearance.

In conclusion, we are compelled to say in relation to Dr. F.'s book, that we think he aimed at too much or too little. The name, "On Renal Affections," is a misnomer. Diseases of the kidneys are only incidentally treated of, the entire work being devoted to the physiology and pathology of the urine.

It is needless to say any thing of the work of Dr. Bird. To those not already familiar with it, the name of its distinguished author is a sufficient guaranty for its practical value. J.

. *The Liver and its Diseases.*

"The jaundiced thus, see all things round them clad  
In yellow; every object as it flows  
Meeting new tides of yellow, from their forms  
Thrown forth incessant; and the lurid eye,  
Deep, too, imbued with its contagious hue,  
Painting each image that its orb asails."

THE above quotation from Lucretius, descriptive of a class of persons whose defective visual organs "see all things round them clad in yellow," cannot fail to remind the reader of certain practitioners, the patients of whom are always *bilious*.

With them constipation or diarrhæa, dry skin or profuse perspiration, want of sensibility or extreme irritability, alike indicate that their patients are bilious, and require, therefore, in their treatment, blue-pill, calomel, or some other mercurial.

This class of physicians, who thus make diseases so unlike in character and symptoms dependent upon the same cause, and, as a consequence, adopt the routine practice above indicated, must be deficient in judgment and mental capacity; or, what is worse, too indolent to obtain and appropriate to their use the facts and information acquired by others, by which their mental vision might be extended, so as to embrace more than a single class of diseases, and one mode of treatment.

In order to show that we are fully justified in making these strictures upon this class of practitioners, we will state briefly what is now known of the structure and functions of that organ, upon the abnormal condition of which these so-called bilious affections are supposed to be dependent.

The *Liver*, as is well known, is a glandular organ, constituted of cells, excretory ducts, and blood-vessels. The cells are supplied by the vena portarum with the imperfectly elaborated and impure venous blood, directly from the absorbing mucous surfaces of the stomach and intestines; whilst the ducts, on the other hand, are surrounded by the terminal branches of the hepatic artery, containing pure blood from the great arterial current.

From recent physiological investigations, it appears highly probable that the hepatic cells abstract from the impure blood in the portal vein the starchy and, perhaps, some other carbonaceous sub-

stances derived from food, and change them either into the fatty constituents of bile, or into sugar, to be reabsorbed by the hepatic veins.

That this change from starch granules to fat globules does in reality take place in the hepatic cells of the higher order of animals, is rendered almost certain by the observations made by Liedy upon the follicular liver of the crustacea.

"When," says he, "a cæcum is viewed beneath the microscope, its lower half appears filled with a finely granular matter, and the anterior half with a mass of fat cells." That some of the carbonaceous substances contained in the blood are changed into sugar, during its passage through the liver, is made evident by the recent very conclusive and highly philosophical investigations of M. Bernard.

"He examined," says Donaldson, "the contents of all the principal venous trunks: the vena porta, the inferior and superior cava, the jugular, etc., and, singular to say, he could nowhere detect its presence (sugar), but in the hepatic veins, and in the ascending cava, and thence to the right auricle. There being no trace of it in the blood flowing into the liver, nor yet in the pulmonary veins, was not our experimenter justified in coming to the conclusion that it was fabricated in the liver and destroyed in the lungs?"

According to Liebig, the saccharine constituents of blood are, by two successive stages of oxydation, converted primarily into lactic acid, and finally into carbonic acid and water. Hence it would appear that sugar, whether absorbed directly as such, or formed in the liver, in the manner above indicated, supplies by its combustion the amount of animal heat required over and above that which would necessarily result from other and more important chemico-vital changes.

In view of these facts, it is rendered highly probable, if not absolutely certain, that the office of the hepatic cells is to take up the starchy materials, contained in the portal blood, and convert them either into fat or sugar, according as they are required or not to subserve the immediate purposes of respiration,—into sugar when, from a deficiency of lactic acid and other organic compounds readily convertible into carbonic acid and water, there

is a deficiency; and into fat, when an excess of these substances affords already an abundant supply of respiratory food.

The sugar thus formed is taken up by the hepatic veins, and passes immediately into the circulation, there to be changed by oxydation; first into lactic or some other organic acid, and finally into carbonic acid and water.

The fat, on the other hand, passes into the terminal branches of the hepatic ducts, where it finds, in the capillary network derived from the hepatic arteries by which they are surrounded, an abundant supply of arterial blood. This, doubtless, furnishes both the oxygen and the alkali, by which the fatty matter is rendered soluble, and made to pass readily and easily through the small hepatic ducts as a fatty acid combined with soda, in the form of bile.

These views of the physiological action of the liver are fully sustained by numerous facts, physiological, pathological, and chemical, which, however cannot be presented in the short space allotted to this article; it being our object at this time, not to sustain our own peculiar physiological views, but to make such practical suggestions as may serve to direct the attention of our readers to the subject, and to show them the absurdity of the present indiscriminate mode of practice, adopted by many, in the so-called bilious affections, supposed to be dependent always upon some morbid condition or action of this much-abused organ.

From what has been said, it is evident that in warm latitudes, and in summer, when there is less oxygen, and, consequently, more lactic and other organic acids in the blood, the liver must change a larger proportion of the starchy constituents of food into fat. If the amount of oxygen and free soda in the blood is sufficient to combine with this fat, and render it soluble, it passes readily out of the liver into the intestines, in the form of bile, and is reabsorbed by the lacteals, like other fatty matter, and no indications of disease appear; or if in great excess, it passes off in the form of profuse bilious discharges, so common in the summer, especially in the south and west. A still greater deficiency of oxygen, and consequent accumulation of organic acids in the blood, to combine with its alkaline constituents, would diminish proportionally the amount of free soda, and thus prevent it from entering into the constitution of bile to a sufficient extent to make it per-

fectly soluble, and to neutralize its fatty acids, and thus give rise to acrid and vitiated bilious discharges, or to congestion, torpidity, and enlargement of the liver, from an accumulation of imperfectly dissolved fatty matter in the hepatic ducts.

Admitting the correctness of the above views, it is evident that the proper treatment for the whole class of liver affections, above-enumerated, would be the administration of alkalies, especially those which are among the natural constituents of blood, such as potash and soda.

Two years' experience in the use of potash and soda, in some of their forms, as remedies in the above-named class of diseases, has convinced the writer that one or both may be used with confidence as substitutes for calomel, in the treatment of such cases.

That the class of remedies under consideration was formerly used much more extensively than at present in liver affections, is evident from the following quotation from Good's Study of Medicine, published in 1829, in which, after discussing the merits of the dandelion as a remedy for jaundice, the author remarks that "soap and alkalies seem to have much better pretensions to favor, and have been still more widely employed in this disease, and pretty generally regarded as general, and hence hepatic solvents."

H.

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*The Meeting of the American Medical Association at Richmond.*

THIS Association has recently held its 6th annual meeting. The numbers in attendance were somewhat less than on most former occasions. As the practical working of the constitutional change effected at Charleston was, for the first time, to be tested, this meeting was one of unusual interest. That change consisted in the abolition of the standing committees, and substituting in their stead nearly thirty special committees. Of these, not more than a fourth part made reports; some requesting to be discharged, and others, we believe, took no notice of their appointment. It can, therefore, scarcely be said that the new plan has had more than very partial success.

The objects of the Association divide themselves into two branches, 1st, Scientific; 2d, Medical Politics.

In reference to the first, it is difficult to say what will be the

result of this meeting. The committee on Prize Essays reported that, of fifteen submitted to their examination, but one was deemed worthy of a prize. This, the subject of which was, The Different Tones of the Sounds perceived in Auscultation, and their value as diagnostic signs,—was from the pen of Prof. Flint, of Buffalo, whose name is a sufficient guarantee of its merit.

Of the different reports it would be unjust to speak from simply listening, as circumstances did not admit of their being clearly heard.

Of the papers offered for reading still less is known, as they were mostly referred to the committee on publication without being heard.

We must await, therefore, the volume of transactions to decide upon the scientific part of the action of this meeting.

In regard to the questions of "medical reform," our information is much more clear. The time of the Association was, in a great measure, taken up in the discussion of proposed amendments of the constitution. These turned mainly on the views published by Dr. Samuel Jackson, of Philadelphia, which are, in short, the turning out of professors, hospital physicians and surgeons as delegates, and admitting all members of county societies as members of the Association.

It seems to be clear to the mind of this philosopher that a life spent in teaching, or hospital practice, disqualifies for the high duty of deliberating on the best interests of the profession, and of sustaining the national character of the Association by contributions to its volumes of published "transactions."

The special committee to whom this subject was referred, adopted these views only in part, proposing to cut off all lunatic asylums and hospitals with less than 100 beds from representations, also all schools with less than six professors, "*except the University of Virginia*," which has four, and diminish the number of delegates to which colleges and other hospitals are entitled, to one instead of two, as at present. This lies over till next year. Of the two plans, that of Dr. Jackson is by far the preferable, as being frank, plain and straight-forward, and effecting at once what the other proposes to do indirectly and by halves. It is also free from such invidious distinctions as the latter proposes. The excep-

tion of the University of Virginia is nominally founded on the peculiarity of their mode of teaching, which, being by lectures and examinations, does not differ sensibly from the plan pursued throughout the Union. Why they should be excepted from a rule that will apply to any other institution which shall adopt the same plan, and lecture the same length of time, we leave to its friends to explain.

To every one acquainted with the organizations of county societies and State societies, and their general decline, it is obvious that the adoption of the plan proposed involves the existence of the Association.

As we propose to return to this subject often during the year, we shall not dwell further upon it here.

New York was selected as the next place of meeting. In making this selection the Association reversed the decision of their own nominating committee, which recommended St. Louis. The West is justly entitled to the meeting every third year; but the small number of delegates it sends prevents it from making its just claims heard in this respect. Practically speaking, it has little interest in the present Association, and we suggest to our brethren of the press and profession, whether the formation of a western association, whose objects should be exclusively scientific, and which should in no wise interfere with the eastern society, would not be desirable.

It is humiliating to witness, that while the National Association for the advancement of Science is invited to meet at different cities, —its members carried and entertained, and their proceedings published, without charge, the Association for the advancement of Medical Science is looked upon only as a combination for the maintenance of the interests of a class, and the promotion of the private objects of its members.

Can it not by its acts free itself from so [low a position in the public mind?

It would be unpardonable to close any notice of the meeting at Richmond without an acknowledgment of the generous and noble hospitality of the citizens and the profession of the State and city. Every institution was thrown open to delegates, and every attention shown calculated to make their visit delightful.

D. B.

*Formula.*

WE have been requested to publish the formula for the preparation of Chloroform. It has already appeared in the *Journal*, but as some of our readers may not have access to the vol. containing it, we insert it again:

## CHLOROFORM.

"Take of Chlorinated Lime ten pounds;  
Water three gallons and a half;  
Alcohol two pints.

"Mix the Chlorinated Lime first with the water, and then with the Alcohol, in a distillatory vessel having the capacity of about six gallons. Distil with a brisk heat into a refrigerated receiver, and, when the temperature approaches to  $176^{\circ}$ , withdraw the fire, in order that the distillation may proceed by the heat derived solely from the reaction of the materials. When the distillation slackens, hasten it by a fresh application of heat, and continue to distil until the liquid ceases to come over with a sweet taste. Separate the heavier layer of liquid in the receiver from the lighter by decantation, and, having washed it first with water, and then with a weak solution of carbonate of soda, agitate it thoroughly with powdered chloride of calcium, and distil it off by means of a water-bath, stopping the distillation when eleven-twelfths of the liquid have come over. The residue, together with the light liquid of the first distillation, may be reserved for use in a second operation.

"Chloroform is a colorless liquid, volatile, not inflammable, of a bland ethereal odor, and hot, aromatic, saccharine taste. Its specific gravity is 1.49, and boiling point  $142^{\circ}$ . It is slightly soluble in water, but freely so in alcohol and in ether. Mixed with an equal volume of sulphuric acid, it does not assume a reddish-brown color, nor is the acid discolored. When dropped into a cold mixture of equal weights of sulphuric acid and water, it sinks to the bottom. If a small quantity be added to distilled water, it forms transparent globules under the water, without assuming a milky appearance."

The accidents recently reported in the use of this article, and the impurities which it often contains, should admonish physicians and surgeons to be cautious both in its selection and administration.

J.

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*Common Salt in Scarlet Fever.*

IN a former number of this periodical, a number of cases were reported illustrative of the beneficial effects of common salt in in-

intermittent and remittent fevers. The following, from the Boston *Med. and Surg. Journal*, shows it is also a valuable remedy in another class of diseases :

Dr. H. A. Ramsay, of Georgia, writes to us that he has used in Southern scarlet fever, in every grade, an emetic of the common table salt. "It is far superior," he says, "to all other remedies of the emetic class; indeed, in my conception, it seems to exert a specific effect upon the disease. The medicine is quite harmless in its operation, and may be repeated with impunity, *pro re nata*. Have you New England physicians ever tried the remedy? If so, with what success? I imagine the scarlet fever of New England is much more *malignant* than in our country."

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*Medical Statistics.*

Colleges.	Matriculants.	Graduates.
Jefferson Med. College, - - -	506	227
Med. College of Ohio, - - -	115	44
Starling Med. Col., - - -	146	35
Kentucky School of Medicine, - -	112	27
Rush Med. College, - - -	120	37
Medical Department of the University of La.,	186	42
Med. School of Harvard University, -	126	38
Med. College of the University of Nashville,	121	33
College of Physicians and Surgeons, N. Y.,	197	59
University of the City of N. Y., - -	179	98
Med. College of Georgia, - - -	158	50
Med. Department of the University of Mich.,	159	27
Med. College of the State of S. C., -	232	103
Med. Institution of Yale College, - -	-	14
University of Louisville, - - -	261	-
N. Y. Med. College, - - -	69	-
N. H. Med. College, - - -	-	16
Female Med. College of Philadelphia, -	-	8
University of Buffalo, - - -	-	20
Med. School of Maine, - - -	60	-
University of Pennsylvania, - - -	-	157
		J.

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*Canada Medical Journal.*

THE *Canada Medical Journal*, edited by Dr. R. S. Macdonnell and Dr. A. H. David, has been received. This journal has taken

the place of the "*British American Journal of Medical and Physical Sciences*." The number received has several of its articles printed in French, which fact, we presume, will render it very acceptable to many practitioners in the province, and others who are acquiring a knowledge of that language. We welcome it to our exchanges.

J

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*N. O. Med. Register.*

The New Orleans Medical Register, edited by A. Forster Axson, M.D., is a neat little work of 12 pages, containing a variety of interesting original and selected matter. We extend to the editor the right hand of fellowship, and wish for him and his little one the success always due to merit.

J.

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*Works received.*

The Annual Discourse before the Phil. Co. Med. Society, by Samuel Jackson, M.D.

Nelson's Northern Lancet.

The Western Journal of Med. and Surg.

The New Orleans Monthly Med. Register, edited by A. Forster Axson, M.D.

The Western Lancet and Hospital Reporter.

The New Jersey Medical Reporter.

The Medical Examiner and Record of Med. Science.

The Medical News and Library.

The St. Louis Med. and Surgical Journal.

The Nashville Journal of Medicine and Surgery.

The Stethoscope and Vir. Medical Gazette.

The Transylvania Medical Journal.

The Charleston Med. Journal and Review.

The Boston Medical and Surgical Journal.

The Canada Medical Journal.

The East Tennessee Record of Medicine and Surgery.

The Am. Journal of Med. Sciences.